

Date: Tuesday, 1/3/2006 4:14:49 PM
User: Kim Johnston

Process Sheet

SPLIT-1

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : SADDLE BILLET
Job Number : 25346 -1	
Estimate Number : 10033	
P.O. Number : <i>N/A</i>	Part Number : D6101003
This Issue : 1/3/2006 S.O. No. : <i>N/A</i>	Drawing Number : D6101 REV A
Prsht Rev. : NC	Project Number : <i>N/A</i>
First Issue : <i>N/A</i> Type : MACHINED PARTS	Drawing Revision : A
Previous Run : 24891	Material : <i>N/A</i>
Written By : <i>SEE COMMENT BELOW</i>	Due Date : 1/30/2006 Qty: 100 Um: Each
Checked & Approved By : _____	
Comment : Est. A: 01.05.04 New Issue EC	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	PG	PURCHASING
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Comment: PURCHASING

Issue P/O: *00000339*

a) Description: Alluminum billet

b) 7.875" x 6.250" x 2.00" thick

c) Tolerance on all dimensions are +0.030"/-0.000"

d) Grain direction along 7.875" length

e) Material: 7075-T7351 (QQ-A-250/12)

f) Material certification required

2.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: PACKAGING RESOURCE #1

Receive & Inspect For Transit Damage

Ensure material certification is attached

3.0	QC6	DIMENSIONAL CHECK
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Comment: DIMENSIONAL CHECK

Ensure Material certification comply to Dwg D6101

4.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: *CNC*

BG 06-04-24

49

BG 06-04-24

49

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: DP Date: 06/04/24
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 1/3/2006 4:14:49 PM
User: King Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SADDLE BILLET

Job Number: 25346

Part Number: D6101003

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL
Inspection Level 21

49
06/04/24

Job Completion



U Doc. 4. 24

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

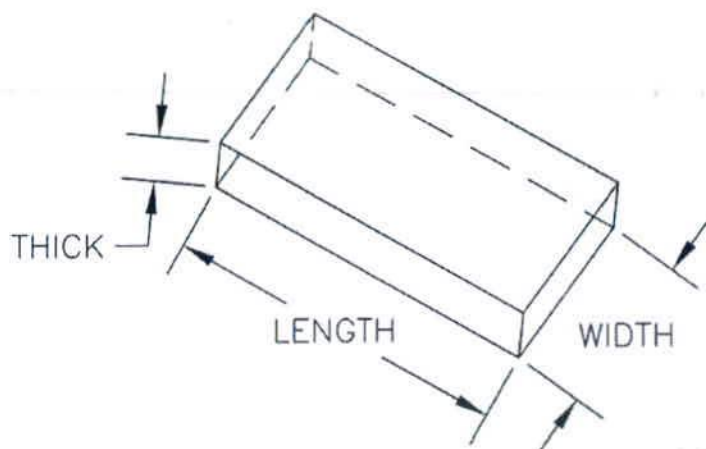
NOTE: Date & initial all entries



DESIGN CP	DRAWN BY CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D6101	Rev. A SHEET 1 OF 1
DATE 01.03.30		TITLE SADDLE BILLET, 7075	SCALE NTS
A	01.03.30	NEW ISSUE	

SPECIFICATION CONTROL DRAWING

RELEASED
01.04.23 #



PURCHASE MATERIAL ACCORDING TO THE FOLLOWING TABLE. SPECIFY ALLOY, LENGTH x WIDTH x THICK (+0.030/-0.000), AND GRAIN DIRECTION AS SHOWN.

TOLERANCES ON ALL DIMENSIONS ARE +0.030/-0.000.

ALL DIMENSIONS ARE IN INCHES.

Part No.	Alloy	Length	Width	Thick	Grain Direction
D6101-001	7075-T7351 (QQ-A-250/12)	6.000	6.250	2.000	Along 6.000 Length
D6101-003	7075-T7351 (QQ-A-250/12)	7.875	6.250	2.000	Along 7.875 Length
D6101-005	7075-T7351 (QQ-A-250/12)	5.000	8.250	2.500	Along 5.000 Length
D6101-007	7075-T7351 (QQ-A-250/12)	7.750	8.250	2.500	Along 7.750 Length
D6101-009	7075-T7351 (QQ-A-250/12)	8.700	8.250	2.500	Along 8.700 Length
D6101-011	7075-T7351 (QQ-A-250/12)	9.700	8.250	2.500	Along 9.700 Length
D6101-013	7075-T7351 (QQ-A-250/12)	10.100	8.250	2.500	Along 10.10 Length

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SHIP TO:

A M CASTLE & CO
3400 NO. WOLF ROAD
FRANKLIN PARK, IL 60131

SOLD TO:

AM CASTLE & CO
3400 NO. WOLF ROAD
FRANKLIN PARK, IL 60131

KAISER ALUMINUM

Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586

CERTIFIED TEST REPORT

Serial Number

4056062

CUSTOMER PO NUMBER: 01-81495		CUSTOMER PART NUMBER: 6857		SHIPPING RUN #/LOAD ID: 100560/10		GOVT CONTRACT NUMBER: UNSA97075-60	
KAISER ORDER NO: 1028650	LINE ITEM: 1	SHIP DATE: 22-DEC-2005	ALLOY: 7075	CLAD: BARE	TEMPER: T7351		
WEIGHT SHIPPED: 5748 LB	QUANTITY: 4 PCS EST.	B/L NUMBER: 206909	GAUGE: 2.0000 IN	WIDTH: 48.500 IN	LENGTH: 144.500 IN		

Certified Specifications

AMS 4078/RevF
ASTM B 209/Rev04
BSS 7055/RevA
GSS16100/RevG
PS 21211/RevJ

AMS-QQ-A-250/12
ASTM B 594/Rev02
CSTI 006/RevB
MIL-STD-2154

AMS-STD-2154
BAC 5439/RevH
DPS 4.713/RevN/AmdAF
MMS 159/RevN

CASTLE METALS FP

Test Code: 4297

Test Results

DATE RECEIVED: 1-3-06
APPROVED: [Signature] 6857

Lot: 355501A6 Cast 869

Drop 31

Ingot 3

Tensile:	Temper	Dir / # Tests		Ultimate KSI (MPA)		Yield KSI (MPA)		Elongation %				
	T7351	LT / 2 (Min:Max)		74.6 : 74.8 (514 : 516)		64.1 : 64.6 (442 : 445)		10.6 : 11.0				
		Conductivity %IACS :		38.6 Min		40.5 Max						
		(MS/M):-		22.4 Min		23.5 Max						
Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	TOT	OTHER
Actual	0.13	0.25	1.59	0.04	2.51	0.19	5.68	0.03	0.01	0.02		0.02

ALLOY LIMITS

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER	MAX
7075 MIN	0.00	0.00	1.20	0.00	2.10	0.18	5.10	0.00	0.00	0.00	EACH	0.05
MAX	0.40	0.50	2.00	0.30	2.90	0.28	6.10	0.20	0.05	0.05	TOT	0.15

Aluminum Remainder



KAISER ALUMINUM

Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586

CERTIFIED TEST REPORT

Serial Number
4056062

TEST NOTES

Metal represented by this test report was immersion
ultrasonically tested from one side and meets the Class A
and Class B requirements of all specifications referenced
on this test report.

CERTIFICATION

KAISER ALUMINUM & CHEMICAL CORPORATION (KAISER) HEREBY CERTIFIES THAT METAL SHIPPED UNDER THIS ORDER WAS MELTED AND MANUFACTURED IN THE U.S.A.
AND HAS BEEN INSPECTED, TESTED, AND FOUND IN CONFORMANCE WITH THE REQUIREMENTS OF THE APPLICABLE SPECIFICATIONS AS INDICATED HEREIN. ALL METAL WHICH
IS SOLUTION HEAT-TREATED COMPLIES WITH AMS 2772. ANY WARRANTY IS LIMITED TO THAT SHOWN ON KAISER'S STANDARD GENERAL TERMS AND CONDITIONS OF SALE.
TEST REPORTS ARE ON FILE, SUBJECT TO EXAMINATION. TEST REPORTS SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF KAISER
ALUMINUM & CHEMICAL CORPORATION LABORATORY. THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULANT STATEMENTS OR ENTRIES ON THE CERTIFICATE MAY BE
PUNISHED AS A FELONY UNDER FEDERAL LAW. ISO-9001:2000 CERTIFIED

BILL POYNOR, LABORATORIES SUPERVISOR



SHIP TO:
A M CASTLE & CO
3400 NO. WOLF ROAD
FRANKLIN PARK, IL 60131

**KAISER
ALUMINUM**

Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586

CERTIFIED TEST REPORT

Serial Number
4055497

SOLD TO:
AM CASTLE & CO
3400 NO. WOLF ROAD
FRANKLIN PARK, IL 60131

CUSTOMER PO NUMBER: 01-81313		CUSTOMER PART NUMBER: 8857		SHIPPING RUN #/LOAD ID: 100555/3		GOV'T CONTRACT NUMBER: UNSA97075-60	
KAISER ORDER NO: 1027007	LINE ITEM: 1	SHIP DATE: 15-DEC-2005		ALLOY: 7075	CLAD: BARE	TEMPER: T7351	
WEIGHT SHIPPED: 5764 LB	QUANTITY: 4 PCS EST.	B/L NUMBER: 206838		GAUGE: 2.0000 IN	WIDTH: 48.500 IN	LENGTH: 144.500 IN	

Certified Specifications

AMS 4078/RevF
ASTM B 209/Rev04
BSS 7055/RevA
GSS16100/RevG
PS 21211/RevJ

AMS-QQ-A-250/12
ASTM B 594/Rev02
CSTI 006/RevB
MIL-STD-2154

AMS-STD-2154
BAC 5439/RevH
DPS 4.713/RevN/AmdAF
MMS 159/RevN

Test Code: 4297

Test Results

Lot: 343361A2 Cast 861 Drop 54 Ingot 4

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T7351	LT / 2 (Min:Max)	75.3 : 75.4 (519 : 520)	64.8 : 65.0 (447 : 448)	10.8 : 11.2

Conductivity %IACS :	40.0 Min	40.8 Max
(MS/M) :	23.2 Min	23.7 Max

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual	0.11	0.25	1.54	0.04	2.54	0.20	5.85	0.04	0.01	0.01	TOT 0.03

ALLOY LIMITS

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER	MAX
7075 MIN	0.00	0.00	1.20	0.00	2.10	0.18	5.10	0.00	0.00	0.00	EACH	0.05
MAX	0.40	0.50	2.00	0.30	2.90	0.28	6.10	0.20	0.05	0.05	TOT	0.15

Aluminum Remainder

CASTLE METALS FP
DATE REC'D 12.19.05 IAC 6857
APPROVED BY: SW

**KAISER
ALUMINUM**

Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586

CERTIFIED TEST REPORT

Serial Number
4055497

TEST NOTES

Metal represented by this test report was immersion
ultrasonically tested from one side and meets the Class A
and Class B requirements of all specifications referenced
on this test report.

CERTIFICATION

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BILL-POYNOR, LABORATORIES SUPERVISOR

Bill Poy

